



Advertisement No. 02/2019

Selection of Research Associates

Number of Research Associate Fellowships: 8 (Indicative)

Last date for submission of Application form: 30/04/2019



*If You Have A Desire To Innovate!*

*We Have An Opportunity To Stimulate!!*

*Come .....Join Hands!!!*

**We provide the means to realize your dreams towards seeking an excellent scientific pursuit.**

Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam is a premier research institute dedicated to the development of robust fast reactor technology based on intense multi-disciplinary research. IGCAR is empowering young, talented and motivated researcher's to contribute to R&D in frontier areas of engineering/scientific research and cutting-edge technologies by offering **Research Associate Fellowships**.

Applications are invited from interested candidates for the position of **8 (indicative) Research Associates** in the Department of Atomic Energy, tenable at IGCAR for a maximum period of three years. IGCAR offers a unique opportunity to carry out research under the guidance of renowned scientists and possesses ambience of an academic institute coupled with an advanced R&D infrastructure in a mission mode. It provides the best ambience, motivation and development prospects for young Doctorates/Post Graduates in Engineering, in their professional endeavors. Endowed with scenic beauty and serene surroundings, IGCAR offers the right ambience for the pursuit of academic research.

The vibrant research and developmental activities of IGCAR encompass a wide spectrum of fields including, Thermal Hydraulics and Structural Mechanics, Design of critical components, Modeling studies, Post-accident Safety Analysis, Wireless networking, Parallel computing, Embedded and Simulator systems, Non-destructive Evaluation and Reliability, Chemical Process Design and Modeling etc. **State-of-the-art** infrastructure is available at IGCAR for carrying out excellent research.

The candidate may download application from [www.igcar.gov.in](http://www.igcar.gov.in) and send scanned copies of completed Application Form and enclosures to [shure@igcar.gov.in](mailto:shure@igcar.gov.in) with subject of the mail as "**Research Associate Position**". The Referee's report (one report from the thesis supervisor) should be forwarded by the Referee directly to us by e-mail, quoting the name of the candidate. **Last date for forwarding of application is 30/04/2019.**

*At IGCAR, we believe in 'EXCELLENCE WITH RELEVANCE'.*

*Our strengths are the highly stimulating and scholarly environment, knowledge and motivating faculty and state-of-the-art facilities*

**AREAS OF RESEARCH PROJECTS**

Core Disruptive Accident (CDA) Analysis, Dynamic Buckling Investigations, Thermo-mechanical Design Studies, Thermal Hydraulic and Structural Mechanics, CFD Analysis of Sodium-water Reaction, Gas Entrainment Studies, Investigation in Buoyancy Driven Safety Grade Decay Heat Removal System, Seismic Analysis, Power Plant Optimisation for FBR.

Diversified Real Time Computer Development using Compact PCI and Software development for fuel handling systems.

A-TIG Welding Process, End Plug Welding for Clad Tubes, Fracture Studies, Fretting Fatigue, Kinetic Monte Carlo simulation, Creep Studies, Mass Transport of Alloying Elements in materials of interest to Fast Breeder Reactors, Calorimetric & Microscopic Characterization and Structural integrity assessment.

Thin Films, Raman Studies, Microcantilever Based Sensors, Soft Matter, Dielectric Spectroscopy and X-ray Structural Analysis, Crystal growth from melts and characterization, Computational Materials Science, Accelerator based Materials Science, Defect spectroscopy of materials and Holographic optical Tweezer Arrays.

Development of Ultra Light Composite Foams, Enriched Potassium Tetrafluoroborate recovery employing ionic liquids, Electrochemical behavior of Pu(IV), Np(IV) and other actinides in ionic liquid, Extraction-electrodeposition of Pu and other actinides using ionic liquid, Synthesis of nuclear solvents in ionic liquid as medium.

*Anil 16/04/2019*

Marine Science/Marine Ecology and Environmental Science (Terrestrial ecology including ecology of inland water bodies).

## 1. QUALIFICATIONS

(a) Doctorates in Science and Engineering (those who have submitted the thesis and with less than two years of Post-Doctoral experience) are eligible to apply.

(b) Post-graduates in Engineering with three years research experience in areas that are highly relevant to the Centre's programme.

## 2. SELECTION PROCEDURE:

Suitable candidates will be selected based on **INTERVIEW** to be held at **Kalpakkam**.

## 3. APPLICATION PROCEDURE:

The researcher may download application from [www.igcar.gov.in](http://www.igcar.gov.in) and send scanned copies of completed Application Form and enclosures to [shure@igcar.gov.in](mailto:shure@igcar.gov.in) with subject of the mail as "**Research Associate Position**" throughout the year. The Referee's report (one report from the thesis supervisor) should be forwarded by the Referee directly to us by e-mail, quoting the name of the candidate. Last date for forwarding of application is 30/04/2019.

## 4. GENERAL INFORMATION

The selected candidates will be informed by post and e-mail. The final induction of the selected candidates as Research Associate will be subject to production of all necessary documents in original (Proof of Date of Birth, B.Sc, M.Sc./B.E./B.Tech/M.Tech./Ph.D. degree and Marks sheets) on the dates intimated to them by the Department.

The number of associateship indicated in this advertisement is approximate and may vary as per the requirement from time to time. The Centre reserves the right not to fill up the associateships any time if it so desires. The associateship shall not confer any claim or right for regular employment in the Centre or any Unit of Department of Atomic Energy. Opportunities exist for meritorious candidates to take up position of Visiting Scientist/KSKRA Fellowships.

**Medical:** The selected candidates are eligible to join the Contributory Health Service Scheme of DAE as applicable.

**Accommodation:** The Selected candidates will be provided with subsidized bachelor Hostel Accommodation or family accommodation in specially deserving cases during the tenure.

**Associateship and Tenure:** The selected candidates will be initially taken for a period of two years. On satisfactory performance, the tenure of associateship will be further extended by one more year.

**Emoluments:** (i) Rs.32,000 - 54,000/- per month (consolidated) depending on qualification and experience  
(ii) contingency grant including book allowance of Rs.32,000/- per year.

Candidates are advised to visit the website <http://www.igcar.gov.in/> periodically for further information and updates in this regard.

## 5. IMPORTANT CHECK LIST

Attested copies of the following certificates **must** accompany the application form without which the application is liable to be rejected.

- ✓ Proof of date of birth
- ✓ Degree certificates
- ✓ Mark lists of B.Sc, M.Sc or B.E./B.Tech., B.S. Engg./B.Sc[Tech], M.Tech.
- ✓ Consolidated mark sheets and calculation for aggregate marks of the qualifying exams to be attached
- ✓ Soft copy of the synopsis must be attached
- ✓ The proof of submission of Ph.D. thesis must be submitted
- ✓ Soft copy of Ph.D. thesis may also be attached, if available

**CANVASSING IN ANY FORM WILL BE A DISQUALIFICATION.**

*R. S. S. S.*  
16/04/19

**PROFORMA FOR APPLICATION FOR THE POSITION OF RESEARCH ASSOCIATE**

**Last date for forwarding of application is 30/04/2019.**

1	Name in full (in block letters)	:					Insert Your Digital Passport size Photograph here
2	Date of Birth (DD-MM-YYYY)	:	/ /				
3	Nationality	:					
4	Sex	:	Male / Female				
5	Marital Status	:	Married / Unmarried				
6	Father's / Husband's Name	:					
7	Caste	:	GEN	OBC	SC	ST	
8	Person with Disabilities	:	Yes	No			

9	Educational Qualifications:						
	Exam. Passed	University/ Institution	Year of Passing	Subjects		Total Marks Obtained	Class/ Division and % marks
				Main	Ancillary		
9a	B.Sc./B.E./B.Tech./B.S. or B.Sc. Engg or Tech						
9b	M.Sc.						
9c	M.Tech.						
9d	Doctoral Degree						

10	Current position and address	:					
11	Area of expertise*	:					
12	Brief summary of work and achievements*	:					
13	Name of the Refree & contact details	:					
14	Other aspects (e.g. whether family accommodation is required)	:					

15	Address:	
	Permanent	Correspondence
	Ph.No: E-Mail id:	Ph.No: E-Mail id:

\* If necessary information may be provided in a separate sheet as annexure

**Declaration**

I hereby certify that the above stated information is factually correct to the best of my knowledge and belief. I have not suppressed any information and in case I give any false information or suppressed any fact, then, my position would be liable for termination without any notice or reasons thereof.

Place:  
Date:

Signature of the candidate

**GOVERNMENT OF INDIA  
INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH  
KALPAKKAM 603 102, INDIA**

**REFEREE'S REPORT ON PROSPECTIVE CANDIDATE FOR RESEARCH ASSOCIATE POSITION**

- 1.1 Name of the candidate :
- 1.2 How long have you known the candidate? :
- 1.3 Kindly indicate in what capacity/capacities have you known and interacted with the candidate

<i>Capacity/Capacities</i>	<i>Years</i>
<i>Teacher</i>	<i>To</i>
<i>Thesis supervisor</i>	<i>To</i>
<i>Colleague in the Faculty/Company</i>	<i>To</i>
<i>Other</i>	<i>To</i>

- 2.0 Kindly give your assessment of the candidate on the following aspect (assess on the scale of 1-10)

- 2.1 Theoretical ability :
- 2.2 Experimental/Practical abilities :
- 2.3 General Professional Knowledge :
- 2.4 Technical judgment :
- 2.5 Personality & Cooperativeness :
- 2.6 Self – reliance :
- 2.7 Communication Ability :
- 2.8 Overall Scientific/Technical capability of the candidate :

- 3.0 Please give overall assessment of Scientific and Technical Capability of the individual:

*Please indicate the candidate's field of specialization including a brief outline of what in your opinion are his/her major contributions. Also make any general comments you may have on the candidate, particularly remarks on any characteristics not brought out so far in your answers to this questionnaire (use separate sheet if necessary)*

*Signature :*

*Name ( in Bold Letters):*

*Date:* \_\_\_\_\_

*Address :*